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WITHERS & KEYS, LLC  
P.O. BOX 71355  
MARIETTA, GA 30007-1355

EXAMINER

STERRETT, JONATHAN G

ART UNIT	PAPER NUMBER
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3623

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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/029,800

Applicant(s)

SMITH ET AL.

Examiner

Jonathan G. Sterrett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10-5-05
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Summary*

1. **Claims 1-25** are pending in the application.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. **Claim 21** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding **Claim 21**, the limitation is cited “determining whether the delay is a justifiable based on a set of established rules”. This limitation is followed by a series of steps. It is not clear that the steps that follow the above limitation are executed if the delay is determined to be justifiable (or are not followed if the delay is not justifiable). Additionally the claim as written includes the definite article ‘a’ before justifiable. It is not clear if the claim means to say the “delay is justifiable” or the “delay is a justifiable [blank] (e.g. event, delay, occurrence)”. Therefore, the claim is indefinite.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which

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said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Norand's Pen\*Key computer product (hereinafter **Norand**) in view of Haugen.

Norand's computer product is disclosed in the following documents:

"Return on Investment Model", web.archive.org webpage of Norand.com, Feb 6, 1998, pp.1-5, hereinafter **Reference A**.

"Norand-Payback", web.archive.org webpage of Norand.com, Feb 6, 1998, pp.1-2, hereinafter **Reference B**.

"Norand-Products", web.archive.org webpage of Norand.com, Feb 6, 1998, pp.1-5, hereinafter **Reference C**.

"Norand-Case Study", web.archive.org webpage of Norand.com, Feb 6, 1998, pp.1-3, hereinafter **Reference D**.

**Haugen**, Dyan L.; Hill, Arthur V; "Scheduling to Improve Field Service Quality", Summer 1999, Decision Sciences, 30, 3; ABI/INFORM Global, pp.783-804.

Regarding **Claim 1**, Norand teaches:

**a communications device operable by a user, wherein the communications device is adapted to receive from the user project information related to a delay associated with a project;**

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Reference A page 2 paragraph 1, The user enters into the handheld computer (i.e. a communications device) information related to the time a task is performed. The time it takes to perform tasks is related to any delays that occur. –see also Reference D page 2 para 1.

**a server accessible by the communications device via a communications network during a communications session to receive the project information from the communications device; and**

Reference A page 2 paragraph 1 and 5, data is automatically updated to a host.

Reference B page 1 paragraph 9 – page 2 paragraph 1, the Norand device operates on a wireless LAN. Since the device operates windows 95 (Reference C), the examiner interprets this to include transferring information, including project information to the server (i.e. host) through a communications session.

**a systems interface coupled to the server, wherein the systems interface is adapted to facilitate uploading of the project information from the communications device to the server during the communications session,**

Reference B page 2 paragraph 2, the integrated radio is a systems interface that facilitates uploading of the project information from the Norand device during a communications session.

**wherein the server is further adapted to update a delay maintenance timer with the project information.**

Reference A page 2 paragraph 1, information is uploaded to the host regarding time stamps so that all the timing associated with various field events are tracked and stored (a delay maintenance timer) for when key activities related to a project (i.e. a delivery) are entered. As discussed above, Norand teaches the handheld synchronizing with a host, including over a WAN which the examiner interprets to include a server.

Norand does not teach where maintenance activities are being tracked in the field to determine a timeline from when repair calls are placed to when service is completed.

Haugen teaches tracking maintenance activities in the field to track a timeline from when a call is placed to when it should be completed and comparing that time to an actual time (– see page 784 para 5, the “gap” between contractual response time and the actual response time, i.e. a maintenance delay. See also page 787 Figure 2 for a diagram of the timing of an example service call and page 786 para 2 for an example timing of a service call where the technician is delayed, resulting in a maintenance delay).

Haugen teaches that if there is a delay (e.g. the technician is tardy), the service organization may suffer a financial penalty and lost goodwill (page 784 para 4).

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Norand and Haugen both address improving service in the field, thus both Norand and Haugen are analogous art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the wireless handheld device of Norand that timestamps the various activities of a service person in the field, to include timestamping the various times of a service call to track and reduce maintenance delays, as taught by Haugen, because it would result in a reduction in delays and thus improve goodwill and reduce financial penalties.

Norand teaches that timestamping the various activities of a service person in the field results in that person being more aware of how they are spending their time and thus results in greater productivity and efficiency, that is, workers do more in less time when they are aware that they are being tracked (Reference A page 2 paragraph A, paragraph 2).

Haugen teaches the importance of reducing the maintenance delays associated with performing service calls to improve customer service and avoid paying fines because some response times to service calls are contractually stipulated to be of a certain service level (i.e. shorter than a predefined time).

The combination of Haugen and Norand would be made by one of ordinary skill in the art with a reasonable expectation of success. All limitations of the claim are anticipated by a combination of Norand and Haugen

Regarding **Claim 2**, Norand teaches where the handheld device provides timing for activities (i.e. a timer) timestamps are made by the handheld system so that every activity is timed when the service person transactions various tasks during their shift. Norand further teaches where information regarding an employee's activities related to time and attendance information can be uploaded to payroll (Reference A page 4 para 10). The examiner interprets the uploading to payroll to be data that is uploaded to a legacy system. As discussed above, Haugen teaches maintenance delay tracking. Norand and Haugen do not teach:

**wherein the delay maintenance timer is associated with a legacy system.**

However, Official Notice is taken that it is old and well known in the art for legacy systems to provide functionalities including for providing for a timer for all kinds of activities, including for a maintenance delay. Legacy systems are used when newer systems are introduced to save money by providing functionality the newer system can rely on.

It would have been obvious to one of ordinary skill in the art to further modify the teachings of Norand and Haugen, regarding providing a maintenance



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delay timer to track field service maintenance activities, to include the step of where the maintenance timer is associated with a legacy system, because it would save time and money in implementing a newer system by providing a functionality through the legacy system.

Regarding **Claim 3**, Norand teaches:

**wherein the project information comprises one or more of a** name of a person authorizing invocation of the DMT; **a customer name**; a telephone number of the customer; a reason for the delay; a date and time the agreement was reached with the customer; a return date and time on which performance of the task should be resumed; and comments.

Reference A page 1 para 9, project information includes a customer name.

Regarding **Claim 4**, Norand teaches:

**wherein the communications device is one of a telephone and a computer.**

Reference A page 1 para 1, Norand's hand held device is a computer.

Regarding **Claim 5**, Norand teaches a computer host and a WAN host for interfacing with a handheld device that is used in the field. Norand teaches this device is facilitated by a wireless systems interface (i.e. integrated radio for interfacing with the wireless network) to connect to the host.

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Norand does not teach:

wherein the systems interface includes one or more of a protocol server and a transaction server.

However, Official Notice is taken that it is old and well known in the art of network computing for a transaction server to be used as a systems interface. Transaction servers are a proven, reliable way to update a database.

It would have been obvious to one of ordinary skill in the art to further modify the teachings of Norand and Haugen, regarding providing a maintenance delay timer to track field service maintenance activities, to include the step of using a transaction server as a systems interface, because it would provide a reliable and proven way to update a database.

**Claims 6-8** recite limitations similar to those addressed by the rejection of **Claims 1-5** above, and are therefore rejected under the same rationale.

Regarding **Claim 9**, Norand teaches tracking project time in the field, but does not teach:

**wherein the project information comprises an amount of time associated with the delay.**

Haugen teaches:

**wherein the project information comprises an amount of time associated with the delay.**

Page 784 para 5 line 6-8, information measured for field maintenance calls includes a gap (i.e. a delay) between contractual response time and actual response time.

Haugen teaches that if there is a delay (e.g. the technician is tardy), the service organization may suffer a financial penalty and lost goodwill (page 784 para 4).

Norand and Haugen both address improving service in the field, thus both Norand and Haugen are analogous art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the wireless handheld device of Norand that timestamps the various activities of a service person in the field and uploads the time stamped project information to a host, to include wherein the project information comprises an amount of time associated with a delay, as taught by Haugen, because it would result in a reduction in delays and thus improve goodwill and reduce financial penalties.

Norand teaches that timestamping the various activities of a service person in the field results in that person being more aware of how they are

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spending their time and thus results in greater productivity and efficiency, that is, workers do more in less time when they are aware that they are being tracked (Reference A page 2 paragraph A, paragraph 2).

Haugen teaches the importance of reducing the maintenance delays associated with performing service calls to improve customer service and avoid paying fines because some response times to service calls are contractually stipulated to be of a certain service level (i.e. shorter than a predefined time).

The combination of Haugen and Norand would be made by one of ordinary skill in the art with a reasonable expectation of success.

Regarding **Claim 10**, Norand teaches tracking project information that is time stamped, as discussed above, but does not teach:

**wherein the amount of time associated with the delay is accumulated in the delay maintenance timer as part of a DMT time to be subtracted from a total time kept by a maintenance clock.**

Haugen teaches:

**wherein the amount of time associated with the delay is accumulated in the delay maintenance timer as part of a DMT time to be subtracted from a total time kept by a maintenance clock**

page 784 para 5, Tardiness (i.e. time associated with the delay) is defined as A (actual arrival time) minus E (expiration time – i.e. total time). Thus the gap

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is defined as a difference between contractual response time and actual response time.

Haugen teaches that if there is a delay (e.g. the technician is tardy), the service organization may suffer a financial penalty and lost goodwill (page 784 para 4).

Norand and Haugen both address improving service in the field, thus both Norand and Haugen are analogous art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the wireless handheld device of Norand that timestamps the various activities of a service person in the field and uploads the time stamped project information to a host, to include determining project time delay by subtracting a delay maintenance time from a total time and storing it in a timer, as taught by Haugen, because it would result in a reduction in delays and thus improve goodwill and reduce financial penalties.

Norand teaches that timestamping the various activities of a service person in the field results in that person being more aware of how they are spending their time and thus results in greater productivity and efficiency, that is, workers do more in less time when they are aware that they are being tracked (Reference A page 2 paragraph A, paragraph 2).

Haugen teaches the importance of reducing the maintenance delays associated with performing service calls to improve customer service and avoid paying fines because some response times to service calls are contractually stipulated to be of a certain service level (i.e. shorter than a predefined time).

The combination of Haugen and Norand would be made by one of ordinary skill in the art with a reasonable expectation of success and all claimed limitations are met by a combination of Haugen and Norand.

Regarding **Claim 11**, Norand and Haugen teach all the limitations above, and Norand teaches:

**a maintenance clock that keeps an overall time associated with the project,**

Reference A page 2 paragraph 1, The user enters into the handheld computer (i.e. a communications device) information related to the time a task is performed. The information includes activities related to a delivery (i.e. a project) and includes time stamps of various activities throughout the course of the driver's day. The examiner notes that the term 'maintenance' is nonfunctional descriptive material because all clocks and timepieces keep time in the same manner using hours, minutes and seconds. See also Reference D page 2 para 1.

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Norand does not teach performing maintenance tasks or projects that are associated with maintenance. Norand also does not teach:

**wherein the amount of delay time is discounted from the overall time.**

Haugen teaches maintenance tasks and projects in performing service calls in the field and also teaches where a gap is defined as  $A$  (actual arrival time, i.e. overall time) minus  $E$  (expiration time, i.e. delay time), thus discounting delay time from the overall time.

Haugen teaches that if there is a delay (e.g. the technician is tardy), the service organization may suffer a financial penalty and lost goodwill (page 784 para 4).

Norand and Haugen both address improving service in the field, thus both Norand and Haugen are analogous art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the wireless handheld device of Norand that timestamps the various activities of a service person in the field and uploads the time stamped project information to a host, to include determining project time delay by discounting a delay maintenance time from an overall time and storing it in a timer, as taught by Haugen, because it would result in a reduction in delays and thus improve goodwill and reduce financial penalties.

Norand teaches that timestamping the various activities of a service person in the field results in that person being more aware of how they are spending their time and thus results in greater productivity and efficiency, that is, workers do more in less time when they are aware that they are being tracked (Reference A page 2 paragraph A, paragraph 2).

Haugen teaches the importance of reducing the maintenance delays associated with performing service calls to improve customer service and avoid paying fines because some response times to service calls are contractually stipulated to be of a certain service level (i.e. shorter than a predefined time).

The combination of Haugen and Norand would be made by one of ordinary skill in the art with a reasonable expectation of success and all claimed limitations are met by a combination of Haugen and Norand.

**Claim 12** recites limitations similar to those addressed by the rejection of **Claim 2** above, and is therefore rejected under the same rationale.

Regarding **Claim 13**, Norand does not teach:

**wherein the legacy system is a work force administration system.**



However Official Notice is taken that it is old and well known in the art for a legacy system to be a work force administration system. Work force administration systems typically encompass administrative activities, such as payroll, and it is old and well known in the art for a legacy system to be a payroll system, for example. Legacy systems, such as payroll (i.e. workforce administration systems), are used in conjunction with newer systems, when newer systems are implemented that provide more functionality.

It would have been obvious to one of ordinary skill in the art to further modify the teachings of Norand and Haugen, regarding providing a maintenance delay timer to track field service maintenance activities, to include the step of where the legacy system is a work force administration system, because it would save time and money in implementing a newer system by providing a functionality through the legacy system.

Norand teaches that the handheld system can update time code information directly to payroll (Reference A page 4 para 10). The examiner interprets the integration of the wireless system with payroll to be an integration with a legacy system. The time card information is electronic since the communication is described as an 'upload to payroll', i.e. a payroll system.

Automation of business processes by computers is old and well known as providing the benefit of improved efficiency and reducing mistakes by the

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automation of repetitive tasks, such as payroll accounting. Management is tasked with seeking ways to improve efficiency including through the application of new computerized technologies. The combination of Norand, Haugen and the Official Notice would be made by one of ordinary skill in the art with a reasonable expectation of success.

Regarding **Claim 14**, Norand teaches that each user has an assigned computer interface but does not teach:

**wherein the systems interface has provisions to determine whether the user is an authorized user.**

However, Official Notice is taken that provisions to determine whether a user is an authorized user (i.e. user id and password) are old and well known in the art. These provide a simple and effective way to ensure that a user in an authorized user.

It would have been obvious to one of ordinary skill in the art to further modify the teachings of Norand and Haugen, regarding providing a maintenance delay timer to track field service maintenance activities, to include the step of ensuring that the user is an authorized user, because it would provide a simple and effective way to ensure that a user in an authorized user.

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Regarding **Claim 15**, Norand teaches where the interface records specific information to each service call, such as special problems (Reference D page 2 para 4) but does not teach:

**wherein the project information includes a reason for the delay.**

Haugen teaches where there are reasons for a delay in servicing customers (page 786 para 2, the technician did not become available in Atlanta until 230 pm, in this example.

Haugen teaches that if there is a delay (e.g. the technician is tardy), the service organization may suffer a financial penalty and lost goodwill (page 784 para 4).

Norand and Haugen both address improving service in the field, thus both Norand and Haugen are analogous art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the wireless handheld device of Norand that records various information regarding a particular service call, including information specific to that service call, to include a reason for a delay, as taught by Haugen, because it would result in a reduction in delays and thus improve goodwill and reduce financial penalties.

Norand teaches that timestamping the various activities of a service person in the field results in that person being more aware of how they are spending their time and thus results in greater productivity and efficiency, that is, workers do more in less time when they are aware that they are being tracked (Reference A page 2 paragraph A, paragraph 2).

Haugen teaches the importance of reducing the maintenance delays associated with performing service calls to improve customer service and avoid paying fines because some response times to service calls are contractually stipulated to be of a certain service level (i.e. shorter than a predefined time).

The combination of Haugen and Norand would be made by one of ordinary skill in the art with a reasonable expectation of success and all claimed limitations are met by a combination of Haugen and Norand.

Regarding **Claim 16**, Norand and Haugen teach the limitations above in Claims 1, 11 and 16 and Norand teaches:

**initializing a maintenance clock upon commencement of a project, wherein the maintenance clock continuously accumulates an overall project time from the commencement to a closeout of the project;**

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Reference D page 2 para 1, the overall time (total time) spent on a service is call is clocked by the technician's handheld device.

**dispatching a service person to a field location of the project;**

Reference D page 2 para 3, technician's schedules for various customers are downloaded into their wireless device for the week. The examiner interprets this functionality to be dispatching the technician to that location to perform that particular service call (i.e. project).

Regarding **Claim 17**, Norand teaches:

**wherein the project information comprises one or more of a name of a person authorizing the amount of delay time; a customer name; a telephone number of the customer; a reason for the delay; a date and time the agreement was reached with the customer; a return date and time on which performance of the task should be resumed, and comments.**

Reference D page 2 paragraphs 1, 2, 4. The name of the customer is included in the service call scheduled.

Regarding **Claim 18**, Norand teaches:

**wherein the inputting step uses a user interface, wherein the user interface has dedicated fields to receive various components of the project information.**

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Reference D page 2 para 2, the technician's handwritten service forms (i.e. dedicated fields to receive various components of the project information) is replaced by the fields in the handheld wireless device.

Regarding **Claim 19**, Norand teaches:

wherein the amount of delay time is accumulated by a delay maintenance timer accessible by the server.

Regarding **Claim 20**, Norand and Haugen teach a maintenance clock and subtracting step, as discussed above but not where:

**wherein the subtracting step is performed by a legacy system that hosts the maintenance clock.**

However, Official Notice is taken that it is old and well known in the art for legacy systems to perform subtracting steps and to host a clocking function. The use of computer systems, including legacy systems to perform subtracting steps and host a clocking function to timestamp activities (i.e. a clock) provides for the automation of the repetitive tasks of subtracting and clocking activities.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the collective teachings of Norand and Haugen regarding providing for clocking maintenance activities in the field and performing a subtracting step to determine a delay to include where the subtracting step is

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performed by a legacy system that hosts the maintenance clock, because the legacy system would provide for the automation of the repetitive tasks of subtracting and clocking (i.e. timestamping) activities.

Regarding **Claim 21**, Norand and Haugen teach all the limitations in claims 1-20 and Norand teaches inputting project information in the field related to specific field service calls and also teaches:

**encountering a delay at the field location;**

Reference D page 2 para 3, calls are not completed on the scheduled day, because the service tech experienced a delay.

**inputting the project information by the field personnel in a communications device at the field location if the delay is a justifiable delay;**

Reference D page 2 para 3, field personnel input information when a call is not completed. The examiner interprets this to mean that when a call is not completed on a schedule day and the field service technician clocks out at the job site, the information is entered that the job is unfinished. Jobs that are not then finished because of a justifiable delay are rescheduled for the following day.

Norand teaches determining whether a delay is justifiable, but not whether a delay is justifiable based on a set of rules.

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Haugen teaches:

**determining whether a delay is justifiable based on a set of established rules;**

Page 787 para 1 line 7-14, rules determine the order that a technician is dispatched. These rules determine whether a delay is justifiable since the delay occurs as a result of the travel time and priority of the call.

Haugen further teaches that there are delays that occur that are justifiable based on occurrences that happen at the job site (e.g. parts are unavailable, see page 784 para 2).

Haugen teaches that if there is a delay (e.g. the technician is tardy), the service organization may suffer a financial penalty and lost goodwill (page 784 para 4).

Norand and Haugen both address improving service in the field, thus both Norand and Haugen are analogous art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the wireless handheld device of Norand that records various information regarding a particular service call when it is late and that there are some delays at the work site that result in an entering of information to reschedule to a next day (i.e. justifiable), including information specific to that service call, to determine whether a delay is justifiable, as taught by Haugen,



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because it would result in a reduction in delays and thus improve goodwill and reduce financial penalties.

Norand teaches that timestamping the various activities of a service person in the field results in that person being more aware of how they are spending their time and thus results in greater productivity and efficiency, that is, workers do more in less time when they are aware that they are being tracked (Reference A page 2 paragraph A, paragraph 2). Norand also teaches that there are delays at the work location that are justifiable in that they require rescheduling to continue the service call to a next day.

Haugen teaches the importance of reducing the maintenance delays associated with performing service calls to improve customer service and avoid paying fines because some response times to service calls are contractually stipulated to be of a certain service level (i.e. shorter than a predefined time).

The combination of Haugen and Norand would be made by one of ordinary skill in the art with a reasonable expectation of success and all claimed limitations are met by a combination of Haugen and Norand.

Regarding **Claim 22**, Norand teaches:

**wherein the project is a task regulated by a governmental agency.**

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Reference A page 4 para 11 – page 5 para 1, Driving hours for a driver, i.e. the amount of time spent driving to perform a delivery are regulated by Federal Government (i.e. DOT) standards, where a driver cannot exceed a number of hours per day and per week.

Regarding **Claim 23**, Norand teaches:

**wherein the established rules include imposition of a fine if the overall project time exceeds a threshold.**

Reference A page 4 para 11 – page 5 para 1, DOT standards are interpreted by the examiner to include fines for violation of Federal Statutes.

Regarding **Claim 24**, Norand does not teach:

**wherein the established rules are service installation guarantee rules.**

Haugen teaches:

**wherein the established rules are service installation guarantee rules.**

Page 784 para 4, service installation guarantee rules i.e. contractually guaranteed response time. Haugen teaches that rules for determining a tardiness (i.e. a delay) incorporates a rule comprising a guaranteed response time.

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Haugen teaches that if there is a delay (e.g. the technician is tardy), the service organization may suffer a financial penalty and lost goodwill (page 784 para 4).

Norand and Haugen both address improving service in the field, thus both Norand and Haugen are analogous art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the combined teachings of Norand and Haugen, regarding providing a wireless handheld device to track a worker's activities with the rule utilization approaches and teachings of Haugen, to include where rules and service installation guarantee rules, as taught by Haugen, because it would improve goodwill and reduce financial penalties by a firm meeting its expressed guarantees.

Norand teaches that timestamping the various activities of a service person in the field results in that person being more aware of how they are spending their time and thus results in greater productivity and efficiency, that is, workers do more in less time when they are aware that they are being tracked (Reference A page 2 paragraph A, paragraph 2).

Haugen teaches the importance of reducing the maintenance delays associated with performing service calls to improve customer service and avoid

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paying fines because some response times to service calls are contractually stipulated to be of a certain service level (i.e. shorter than a predefined time). Haugen teaches optimizing the dispatching of technicians to service calls in order to reduce any fines associated with not meeting contractual obligations.

The combination of Haugen and Norand would be made by one of ordinary skill in the art with a reasonable expectation of success and all claimed limitations are met by a combination of Haugen and Norand.

**Claims 25** recites similar limitations as those recited in **Claim 20** above, and is therefore rejected under the same rationale.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Ivey, Mike; "Cub: Toughen Penalties Vs. Ameritech", Sep 7, 2000, Madison Capital Times, Madison, Wisconsin, p. 1E, ProQuest ID 59714682.

Jaffe, Charles; "Gas Supplier takes timing seriously if deliveries are late, the product is free", Feb 5, 1989, The Morning Call, Allentown PA, p.D.01, ProQuest ID 92485879.

Lister, Karen; "Improvements cited in Portland cable service", Jul 21, 1995, Corpus Christi Caller Times, Corpus Christi, Tex., Sec. B, p.2, ProQuest 6892257.

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"Powering better customer service. (Boston Edison implements mobile computing solution)", May 1997, Communication News, v34, n5, p50(2), Dialog 02070908 19414033.

Kosseff, Jeffrey; "Service Delays May Lead to AT&T Fine", Jul 18, 2001, The Oregonian, Portland, Ore., pg.C.01, ProQuest ID 75527844.

US 6578005 by Lesaint discloses a real time scheduling system that incorporates changes in real time.

US 5920846 by Storch discloses a method for processing telecommunication service requests.

US 5848403 by Gabriner discloses a method for a genetic algorithm scheduling system.

US 5623404 by Collins discloses a scheduling method dealing with requests of uncertain durations.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan G. Sterrett whose telephone number is 571-272-6881. The examiner can normally be reached on 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 571-272-6729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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JGS 1-12-06

*Susanna Diaz*  
SUSANNA M. DIAZ  
PRIMARY EXAMINER  
*AU 3623*